

DIFFERENTIAL PRESSURE GAUGE FOR CRYOGENIC
FLUIDS WHICH SELECTS A DENSITY VALUE BASED ON
PRESSURE MEASUREMENT

ABSTRACT OF THE DISCLOSURE

A differential pressure gauge for a cryogenic storage tank provides onboard entry, by an operator, of tank dimensions, tank orientation stratification coefficient, and the type of liquid stored within the tank. A differential pressure sensor supplies a signal corresponding to a differential pressure. A pressure sensor supplies a signal corresponding to the head pressure. The gauge uses the information supplied by an operator, combined with stored formulas and liquid characteristics, to perform real-time liquid volume computations. The liquid volume may be displayed on the gauge itself or may be transmitted via telemetry to an external device.